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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,841	09/15/2003	Kenneth R. Schmidt	GP-303099	1190
7590 08/30/2005			EXAMINER	
KATHRYN A MARRA			KERNS, KEVIN P	
General Motors	Corporation			
Mail Code 482-C23-B21			ART UNIT	PAPER NUMBER
P.O. Box 300			1725	
Detroit, MI 48265-3000			DATE MAILED: 08/30/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		M			
	Application No.	Applicant(s)			
	10/662,841	SCHMIDT ET AL.			
Office Action Summary	Examiner	Art Unit			
7	Kevin P. Kerns	1725			
The MAILING DATE of this communication ap Period for Reply	pears on the cover sneet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on 10 A	August 2005.	i			
2a)⊠ This action is FINAL . 2b)□ Thi	s action is non-final.				
3) Since this application is in condition for allowa)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
 4) Claim(s) 1-3,6-15,19 and 21-25 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 8,9,15,19 and 21 is/are allowed. 6) Claim(s) 1-3,7,10,11,13 and 22-24 is/are rejected. 7) Claim(s) 1,6,12,14 and 25 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 					
Application Papers					
9) The specification is objected to by the Examin 10) The drawing(s) filed on 15 September 2003 is. Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	/are: a)⊠ accepted or b)□ objected or b)□ objected drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). sjected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)					
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 	Paper No(s)/Mail D. 5) Notice of Informal F 6) Other:	ate Patent Application (PTO-152)			

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DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: in the 3rd line, "a" should be deleted before "major". Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 4. Claims 1-3, 7, 10, 11, 13, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertels (US 3,202,793).

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Bertels discloses a process and member for joining by welding light metals with steel, in which the process and member includes welding a metal sheet (steel plate 9, which has a planar surface on its side to be welded) to an edge of a metal bridging patch (zinc-plated strip member 10), with the strip 10 being welded on its other edge to an aluminum tube 8, such that the welds are fillet welds (12,13) accomplished in a conventional manner, including arc welding, for example (column 1, lines 11-13 and 59-72; column 2, lines 1-22; and Figures 1 and 2). Although Bertels does not specifically disclose the use of spot welding, drawn arc welding, or a tube thickness, one of ordinary skill in the art would have recognized that selection of an optimum tube thickness would provide sufficient heat transfer properties while providing sufficient strength and rigidity to the structure. Furthermore, Bertels discloses "a conventional manner, e.g. by arc welding", but one of ordinary skill in the art would have recognized that other welding techniques, including spot welding and drawn arc welding, would have been obvious to the welding artisan, with selection of the welding technique being dependent on materials and/or dimensions of the workpieces to be welded.

Allowable Subject Matter

- 5. Claims 8, 9, 15, 19, and 21 remain allowed.
- 6. Claims 6, 12, 14, and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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7. The following is a statement of reasons for the indication of allowable subject matter: the reasons for indicating allowable subject matter for independent claims 8 and 15 are unchanged from those indicated in a prior Office Action. In addition, the prior art fails to teach or disclose a welded sheet-to-tube structure and a method for its production having the features of independent claims 1, 10, and 24, and further including the following additional features: conducting spot welding to obtain a metal sheet spot welded to multiple bridging patches (dependent claims 6, 12, and 25); and the metal sheet further comprises a roof panel of a vehicle (dependent claim 14).

Response to Arguments

- 8. The examiner acknowledges the applicants' amendment received by the USPTO on August 10, 2005. The amendment overcomes the prior claim objections, but a new objection to claim 1 has been raised by the amendment. In addition, the amendments to the claims overcome prior 35 USC 102(b) rejections. The applicants have cancelled claims 16 and 20, and added new claims 22-25. Claims 1-3, 6-15, 19, and 21-25 are currently under consideration in the application.
- 9. Applicants' arguments filed August 10, 2005 have been fully considered but they are not persuasive.

With regard to the applicants' remarks/arguments on pages 5 and 6 of the amendment, the applicants have misinterpreted the previous reasons for indicating

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allowable subject matter, as the <u>bridging patch having a major side to which the metal</u> <u>sheet is spot welded</u> (see cancelled dependent claim 16 of the prior Office Action) is the allowable subject matter, rather than the major side of a metal sheet, as set forth in independent claims 1, 10, 22, and 24. As a result, these claims remain rejected under 35 USC 103(a). The obviousness of the type(s) of welding is/are set forth in paragraph 4 as being suggested/obvious over Bertels.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kevin P. Kerns whose telephone number is (571)

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272-1178. The examiner can normally be reached on Monday-Friday from 8:00am-

5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Kevin P. Kerns Kerin Kerns 8/26/05

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Primary Examiner

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KPK kpk

August 26, 2005